

## PATENT ABSTRACTS OF JAPAN

(11)Publication number : 10-005191

(43)Date of publication of application : 13.01.1998

(51)Int.Cl.

A61B 5/055  
G01N 33/48

(21)Application number : 09-071923

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(22)Date of filing : 25.03.1997

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(30)Priority

Priority number : 96 622718 Priority date : 26.03.1996 Priority country : US

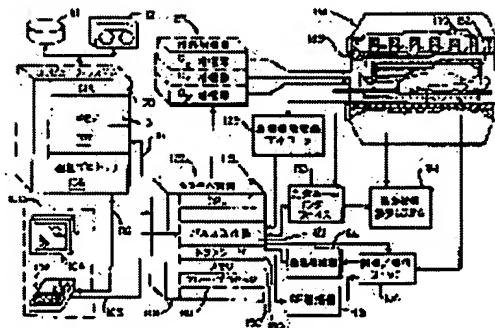
(54) THREE-DIMENSIONAL DIGITAL SUBTRACTION MAGNETIC RESONANCE  
ANGIOGRAPHY

(57)Abstract:

PROBLEM TO BE SOLVED: To increase reconfigured continuous images and identify dynamic changes in a patient at highly precisely without reducing the accuracy of a diagnostic evaluation by sampling the central region of a (k) space at the speed higher than the sampling speed in the circumferential region of the (k) space.

SOLUTION: A transceiver module 150 generates an RF excitation magnetic field in a coil 152, and a signal generated by a patient is detected by a receiver coil and inputted into a receiver attenuator via an amplifier 153.

An NMR signal it mixed with a carrier signal, its difference signal is mixed with a reference signal, the obtained signal is A/D converted, an in-phase (I) value



and an orthogonal (Q) value of 16 bit are generated, and a composite stream of both values are stored. A phase encoding pulse is stepped by a series of values so as to sample a three-dimensional (k) space, and image frame is reconfigured by using the collection data of the (k) space from the central region sampled at relatively high speed.

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#### LEGAL STATUS

[Date of request for examination]	18.09.2000
[Date of sending the examiner's decision of rejection]	07.09.2004
[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]	
[Date of final disposal for application]	
[Patent number]	
[Date of registration]	
[Number of appeal against examiner's decision of rejection]	2004-24887
[Date of requesting appeal against examiner's decision of rejection]	06.12.2004
[Date of extinction of right]	

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